

Material Data Sheet

Fine Polyamide PA 2200 for EOSINT P

Application:

PA 2200 is suitable for use in all EOSINT P systems with fine polyamide option. The recommended layer thickness is 0.15 mm. Unexposed powder can be reused. Depending on building time it has to be mixed with fresh powder by a ratio of 2:1 to 1:1 (old : new) in order to guarantee constant process parameters and persisting part quality.

Typical applications of the material are fully functional prototypes with high end finish right from the process. They easily withstand high mechanical and thermal load.

Material Properties:

Average grain size	Laser diffraction	60	µm
Bulk density	DIN 53466	0,435 - 0,445	g/cm ³
Density of laser-sintered part	EOS-Method	0,9 - 0,95	g/cm ³

Mechanical Properties:*

Tensile Modulus	DIN EN ISO 527	1700 ± 150	N/mm ²
Tensile strength	DIN EN ISO 527	45 ± 3	N/mm ²
Elongation at break	DIN EN ISO 527	20 ± 5	%
Flexural Modulus	DIN EN ISO 178	1240 ± 130	N/mm ²
Charpy - Impact strength	DIN EN ISO 179	53 ± 3,8	kJ/m ²
Charpy - Notched impact	DIN EN ISO 179	4,8 ± 0,3	kJ/m ²
Izod – Impact Strength	DIN EN ISO 180	32,8 ± 3,4	kJ/m ²
Izod – Notched Impact Strength	DIN EN ISO 180	4,4 ± 0,4	kJ/m ²
Ball indentation hardness	DIN EN ISO 2039	77,6 ± 2	
Shore D - hardness	DIN 53505	75 ± 2	

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Thermal Properties:

Melting point	DIN 53736	172 - 180	°C
Vicat softening temperature B/50	DIN EN ISO 306	163	°C
Vicat softening temperature A/50	DIN EN ISO 306	181	°C

* The mechanical properties depend on the x-, y-, z-position and on the exposure parameters used.

The data are based on our latest knowledge and are subject to changes without notice. They do not guarantee properties for a particular part and in a particular application.